SCOPE OF WORK:

The policies, procedures and regulations analyst team ("PPR Analyst") will be responsible for analyzing the local, state and federal policies, regulations and procedures that potentially affect regional sediment management, (e.g., beach nourishment) activities. These activities include the dredging/excavation, transportation and "disposal" of sediment in coastal watersheds and littoral cells. Of particular interest are compatibility of various source or supply sands, and turbidity issues associated with those activities.

The analyst's goal will be to identify specific problems within the sediment management permitting process throughout California, and make specific recommendations on how best to resolve those problems in order to streamline that process. The analysis of relevant state and federal regulations will include an assessment of the legislative intent behind those regulations and updates as appropriate, and ascertain whether policies and procedures in use by the regulatory agencies follow that legislative intent. The PPR Analyst will also compare and contrast how other coastal states are handling permitting issues with respect to beach nourishment and regional sediment management, and include those measures deemed beneficial to beach nourishment within their final report. As part of this effort, the Analyst team will also review the attached list of regulatory concerns surrounding how turbidity and sand compatibility issues are handled (Attachment 1), and consider the Attachment's "themes" as part of their analyses. Finally, the PPR Analyst will detail specific procedures on how best to implement the recommended changes in order to streamline the beach nourishment process in California.

The PPR Analyst will work closely with the Project Manager (PM) of the California Coastal Sediment Management Workgroup's (CSMW's) Master Plan, and with Neal Fishman of the State Coastal Conservancy, who will serve as the point of contact for the CSMW Steering and Advisory Committee.

A series of public workshops and meetings with local, county and regional government agencies will be held throughout the coastal portions of the state as one of the early tasks in the Master Plan and Sediment Compatibility and Impact Study development. The PPR analyst will need to coordinate with CSMW and the Public Workshop Facilitator to participate in the workshops.

The PPR analyst will also need to coordinate and conduct meetings with select local agencies not able to participate in the Workshops. Those meetings will be used by CSMW to share Master Plan goals with local, county and regional government agencies, as well as representatives from agencies such as flood control, public works, port and harbor districts, and beach management. Since information on local policies, procedures and regulations that govern regional

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sediment management-related activities will be gathered at these agency meetings, the PPR Analyst will be responsible for setting up these meetings.

Finally, the PPR analyst will also need to coordinate with the Master Plan's GIS Analyst to develop GIS databases that will provide for incorporation of the findings of the PPR Analyst effort into the Master Plan GIS. Information available in GIS format will be requested from the local agencies for inclusion in the Master Plan GIS database. The PPR Analyst will also develop a "Who's Doing What Where" database of agencies involved in sediment management and beach nourishment along the coast of California. The database will serve as a reference to the ongoing and planned activities of agencies with jurisdiction over California's coast, enabling users to look-up information and conduct simple analyses of interagency activities.

SPECIFIC TASKS:

Various tasks associated with the PPR effort at listed below. To identify the desired emphasis for each Task, the approximate level of effort expected for each Task is identified in terms of percentage of the overall project effort.

- 1) Identify, discuss intent and analyze application of current state and federal PPRs in relation to coastal watersheds and sediment management [25%]
 - Identify and list all state and federal agencies with jurisdiction over regional sediment management in open coastal watersheds and littoral cells. Define appropriate jurisdictional boundaries for the GIS. Include those that typically review and provide comment on permits issued by others.
 - Develop a database of state and federal PPRs, identifying variables such as conditions that may affect which PPRs are used to regulate the beach nourishment-related activity, and any standards that are not being consistently applied statewide.
 - Compile a comprehensive list of permits and/or regulatory approvals that have been issues for beach nourishment projects. Analyze permits and regulatory approvals for project descriptions, permit conditions, etc. for indications of the critical concerns of various regulatory groups. Identify how turbidity and sand compatibility issues were addressed during the permitting process
 - Compile digital copies of all relevant PPRs
 - Summarize how other coastal states are proceeding with beach nourishment. Identify stumbling blocks and innovative methods being used by other coastal states to facilitate beach nourishment.
 - Analyze the PPRs and identify those that are supportive of increasing, either artificially or naturally, the supply of sand to the state's coastal beaches, including any specific conditions that apply to those PPRs

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- Analyze the PPRs and identify those that are impediments to supplying sand to the state's coastal beaches, through either artificial or natural means, including but not necessarily limited to those that may be in conflict with each other, not being consistently applied, limit the time beach nourishment can occur or the amount and/or type of sands that can be used.
- 2) Develop a draft "Beach Nourishment Reference Guide" that defines the requirements of each agency with jurisdictional responsibility for the California coastline, and illustrates the regulatory process via flow charts or similar graphics. The guide would represent an informational tool for those interested in the beach nourishment process and be posted on the CSMW's website early on in the project. The guide would illustrate to interested parties the difficulties involved in getting a beach nourishment project approved. The guide would be updated near the project end to reflect knowledge obtained during the project, specifically recommendations on how to streamline the beach nourishment process. [15%]
- 3) Research current local, county, and regional PPRs related to regional sediment management in open coastal watersheds and littoral cells. [10%]
 - Participate in the public workshops, facilitate local agency meetings, and identify all local, county, and regional areas along the entire California coast with sediment-related problems and opportunities. Identify the local, county and regional agencies with jurisdiction over sediment transport, disposal, dredging/excavation, turbidity and sand compatibility in open coastal watersheds and littoral cells for which problems and opportunities have been identified. Identify jurisdictional boundaries for the GIS, and identify other entities that may review and provide comments on permits.
 - Develop a database of relevant local, county and regional PPRs related to sediment transportation, disposal, and dredging/excavation in open coastal watersheds and littoral cells.
 - Compile digital copies of the relevant PPRs
 - Compile a comprehensive list of information that has requested by local, county and regional agencies during the permitting process for historical beach nourishment projects. Identify how turbidity and sand compatibility issues were addressed during the permitting process
 - Analyze the PPRs and identify those that are supportive of increasing, either artificially or naturally, the supply of sand to the state's coastal beaches, including any specific conditions that apply to those PPRs
 - Analyze the PPRs and identify those that are impediments to increasing the supply of sand to the state's coastal beaches, through artificial or natural means, including but not necessarily limited to those that may be in conflict with each other, not being consistently applied, limit the amount of time beach nourishment can occur or the amount and/or type of sands that can be used.

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- 4) Based on all analyses, make specific recommendations for changes to existing PPRs and suggestions for new PPRs that would facilitate regional sediment management at all levels of government. Prioritize those recommendations based on a methodology to be agreed upon by the PPR Analyst, the PM and the CSMW, and identify the appropriate steps that are necessary to initiate and follow through on these changes. [25%]
- 5) Prepare a final report for inclusion on the project web site and in the final Implementation Strategy. The report's focus will be a hard-hitting analysis of all PPRs in California with specific recommendations on how to streamline the beach nourishment process and steps needed to implement the recommended changes. Supporting information as described below will be included within the report. [15%]
 - Federal, state, regional and local entities with jurisdiction and maps showing their area of governance.
 - Summaries of federal, state, regional, county and local PPRs affecting regional sediment management, including legislative intent behind these PPRs
 - Protocols or checklists being used or contemplated by various agencies with jurisdictional responsibility for regional sediment management-related activities.
 - PPRs that are supportive of increasing, either artificially or naturally, the supply of sand to the state's coastal beaches
 - PPRs that are impediments to increasing the supply of sand to the state's coastal beaches.
 - A review of the attached list of regulatory concerns (Attachment 1), and, to the extent possible, recommendations on how best to address these concerns.
 - Important findings from the local meetings
 - A list of important and/or critical definitions used by agencies involved in regional sediment management (i.e., where does placement of sands "on the beach" or "nearshore" refer to?)
 - Coordinate the review of the report by the Project Manager and Master Plan Steering and Advisory Committees.
- 6) Work with the Project Manager and GIS Analyst to link the information collected during the study to the Master Plan GIS being developed by USACE. [10%]
 - Under direction from the GIS Analyst, create a GIS database to be populated with project findings during the project.
 - Provide georeferenced digital copies of the PPRs to the Master Plan GIS Analyst.

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- Develop geographic representations of the jurisdictional limit of each PPR in the Master Plan GIS.
- Assist the GIS Master Plan Analyst in creating a metadata record for the PPR data layer.
- Under direction from the GIS Analyst, develop a "Who's Doing What Where" GIS database of all local, regional, state and federal agencies involved in sediment management activities related to beach nourishment along the coast of California. The database will serve as a reference to the ongoing and planned activities of agencies with jurisdiction over California's coast, enabling users to look-up information and conduct simple analyses of interagency activities
- Provide all respective maps and visualization tools necessary for inclusion in the final report

Project Deliverables:

The PPR Analyst will be responsible for the delivery of the following work products:

- A list of federal, state (California and other coastal states), and appropriate regional, county and local PPRs related to regional sediment management in open coastal watersheds and littoral cells.
- 2. A database of PPRs
- 3. Digital copies of PPRs
- 4. A "white paper" describing specific recommendations for changes to existing PPRs and suggestions for new PPRs that would facilitate regional sediment management at all levels of government
- A draft and final report containing the PPR analysis. The report will be finalized after incorporation of the Project Manager and Steering Committee's comments on the draft report.
- 6. Project findings and "Who's Doing What Where" databases for the Master Plan GIS.
- 7. Draft and final Beach Nourishment Reference Guides

SCHEDULE:

Flexible, but project completion is desired within 6-8 months of project startup.

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ATTACHMENT 1

Regulatory Concerns Surrounding Turbidity, Sand Compatibilities and Beach Nourishment

Note to Reader: This list of concerns was distilled from a larger list compiled during a series of technical Workshops, hosted by the CSMW during the summer of 2003. The concerns detailed below relate to the regulatory climate surrounding sediment management and beach nourishment. After completion of the Workshop series, the CSMW Project Manager grouped the original comprehensive list of concerns into categories such as this one, and further subdivided those categories into "themes" to facilitate further discussion and provide input for Master Plan efforts. Workshop participants included project proponents, consultants, regulators and reviewers involved in sediment management and beach nourishment; each participant was asked to express their concerns with respect to turbidity resulting from and compatibility of sands with various grain size distributions used to nourish beaches. A complete list of all concerns can be obtained from the CSMW Project Manager at Clifton.Davenport@fire.ca.gov.

A. Competing regulatory interests are difficult to resolve.

- 1- Project Proponents need consensus from all RWQCBs, USEPA and USACOE on how turbidity issues will be regulated. National Marine Sanctuary is very strict in their interpretation of regulations that involve turbidity.
- 2- Many disparate limits on turbidity are often placed on dredging or beach nourishment activities during the regulatory process.
- 3- Regulators and reviewers need to collaborate more during the permitting phase in order to eliminate project starts & stops.
- 4- All requirements need to be clearly identified early in the project, and followed by the regulator/reviewer, as the contractor conducting the dredging/nourishment activities has no flexibility to handle changing requirements.
- 5- Detailed guidance on what's acceptable to all agencies involved in the beach nourishment project is needed.
- 6- Each RWQCB looks at issues based on their individual basin plan objectives, which are not necessarily the same. As a result, when beach nourishment projects cross basin boundaries, the SWRCB must be involved.
- 7- On USACE projects, USACE regulators should require turbidity & sand compatibility standards similar to those required by them when regulating other entities.
- 8- Procedures should be documented in such a way that they can be administered by non-technical folks, and yet address technical concerns.
- 9- An exhaustive list of all questions and concerns that regulators may have could potentially confuse many permittees if not properly constructed.

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- 10- It is potentially feasible that a California Coastal Commission beach nourishment "protocol" or guidance template could be developed.
- 11- Each RWQCB may handle permitting differently (i.e., dredging projects handled via Waste Discharge Requirements vs. 401 Water Quality Certification) and this affects project lead times (i.e., 2-3 months for WDRs vs. 1-2 months for 401 Certs, assuming completed permit application in hand)

B. Reasonable regulations that are protective and yet cost-effective are needed.

- 12- Permissible "windows of opportunity" allowing the project to proceed, are often so limited that the project can not be completed in a timely manner.
- 13- Some turbidity sampling requirements or limits (i.e., monitoring on a one-hectare basis) require costly additional efforts (mapping every day) to meet such requirements.
- Restrictions on beach nourishment projects have increased over time, reducing project proponent's ability to complete beach nourishment projects.
- 15- Boundaries of multi-million dollar projects are typically indistinct, and conditions may vary within the project area, yet restrictive criteria are typically applied to all areas within the project.
- 16- The low turbidity levels currently required by regulators during dredging/beach nourishment activities are well below the highest measured levels from watershed turbidity plumes.
- 17- Beach nourishment can't be directly compared to natural turbidity events, except in areas near river mouths, where the local ecosystems may have evolved to handle impacts from high turbidity events.

C. <u>Data Requirements</u>:

- 18- The LARWQCB is open to the concept of rule modifications affecting beach replenishment if they receive good supporting documentation demonstrating that the project would not cause water quality problems.
- 19- Coordination between the regulators, reviewers and project proponents very early in the project is critical for smooth processing of permits. Having all necessary information up front will save time in the long run.
- 20- Beach nourishment projects need to provide adequate background technical information on sediment fate and transport, and comply with CEQA's environmental review mandate.
- An appropriate monitoring plan must be in place to ensure compliance with permit requirements. Adequate planning ahead of time and contingency measures built into the permit can forestall non-compliance situations that could otherwise result in significant financial penalties or work stoppage.
- 22- Some confusion exists as to exactly where "placement of sands on beach" refers to, and a regulatorily accepted definition would be useful.
- 23- "Master Permits" are often too broad to properly evaluate, and therefore need to be crafted to allow such evaluation.

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D. The beach nourishment process must be beneficial:

- 24- The California Coastal Commission looks at beach nourishment within the bigger picture of access and usage.
- 25- Regulatory agencies do not want our beaches to become dumping grounds for just any available or unwanted material
- 26- Crushed inland sand was offensive to beach patrons at Avila.
- 27- Regulators and the public are concerned about the materials potentially being used (toxics, color, etc.)
- 28- EPA's policy is that whenever "beach quality" sand becomes available from dredging, it should go to the beach or other beneficial uses.
- EPA draws an absolute line at 51% sand. For dredged materials with a lesser percentage, the basic project purpose would be considered "disposal" as opposed to beach nourishment, and a different disposal site would be needed. For material that is 80% or more sand, it is generally presumed to be appropriate for beach nourishment. However, for material that is between 51% and 80% sand, it cannot be presumed that there would not be adverse environmental impacts. EPA therefore looks for an adequate site specific evaluation (typically coupled with monitoring) when material with less than 80% sand is proposed for beach nourishment.
- 30- Beach nourishment projects conducted at night should minimize the concern about the impact such activities might have on visual feeders (i.e., birds and fish).

E. Scientific Basis for Regulations:

- Laws affecting beach nourishment must keep up with science. CSMWs efforts should be directed towards a careful evaluation of such laws, and developing recommendations for changing those laws, if necessary and appropriate.
- Laws affecting beach nourishment should reflect that if fines don't cause harm then they should not be treated as waste.
- Coastal processes differ significantly from east to west coast. In the past, federal policy maker's decisions have reflected east coast processes.
- All studies and regulations should avoid "technopolitics" (twisting of science to meet political agendas) and focus on what the impacts actually are/are not.
- 35- "Technopolitics" is separate from and should not be confused with disagreements about established legal/regulatory requirements, or burden-of-proof issues. In general, both the state and federal laws and regulations take a precautionary approach when it comes to protecting beaches and marine life. It is a project proponent's burden to show that an adverse impact will not occur, rather than the agencies' burden to allow disposal unless they can prove that an impact will occur.

F. Materials Availability

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- Permitting and reporting time are often lengthy; these delays often result in loss of opportunity for opportunistic use of beach nourishment materials, as the contractor is on a schedule.
- Project proponents need staging areas where they can place/store potential feed stock for beach nourishment projects, so that these materials don't have to be sent to a landfill.
- 38- Pleistocene sand dunes exist throughout LA County, and, due to project constraints, there is often a very limited time to utilize or intercept this resource before it disappears into a landfill.
- 39- Sand miners are currently using beach quality sands dredged from channels, etc. for aggregate. Often the sand miners coordinate efforts with regularly schedule dredging by USACE to have sand placed in piles for their use. USACE contracting rates will need to be revised if these materials are to become beach materials.

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